



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : 6DS-L40-840-DIM-UNV-RM-OF-WH\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 20356.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 03/12/2021

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] 6"SHORT HEATSINK 6"SQ CAST HOUSING DOWNLIGHT

[MORE] ACRYLIC MED TIR OPTIC & 6"CAST WHITE REGRESS TRIM w/SOLITE

[MORE] LENS

[LUMCAT] 6DS-L40-840-DIM-UNV-RM-OF-WH

[LAMPCAT] LAMP CODE : BXRE-35E2000

[\_SEARCH\_SOURCETYPE] LED

[\_SEARCH\_APPLICATION] Indoor, Classroom, Commercial, Industrial, Office, Direct, Downlight

[\_SEARCH\_MOUNTING] Recessed

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4028
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	41.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.56
Spacing Criterion (90-270)	0.56
Spacing Criterion (Diagonal)	0.56
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.50 ft
Luminous Width (90-270)	0.50 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9418	11087	7629
55	4997	5438	4703
65	3391	2792	2792
75	1303	1628	1628
85	0	0	0

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6DS-L40-840-DIM-UNV-RM-OF-WH\_.IES**

**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0</b>	10286.098	10286.098	10286.098	10286.098	10286.098
<b>5</b>	9751.119	9709.967	9709.967	9733.482	9790.312
<b>10</b>	8328.428	8204.971	8073.676	8142.263	8177.536
<b>15</b>	5961.194	5955.316	5884.769	5863.213	5861.253
<b>20</b>	3746.813	3633.154	3525.374	3390.160	3352.927
<b>25</b>	1994.903	1998.823	1893.003	1836.173	1761.707
<b>30</b>	1056.241	1048.402	997.452	944.542	885.753
<b>35</b>	544.777	572.212	582.010	489.908	446.796
<b>40</b>	282.187	291.985	327.258	258.671	219.479
<b>45</b>	154.811	160.690	182.246	145.013	125.416
<b>50</b>	96.022	103.860	109.739	96.022	84.264
<b>55</b>	66.627	68.587	72.506	66.627	62.708
<b>60</b>	48.991	48.991	48.991	48.991	47.031
<b>65</b>	33.314	31.354	27.435	31.354	27.435
<b>70</b>	19.596	19.596	19.596	19.596	19.596
<b>75</b>	7.839	9.798	9.798	9.798	9.798
<b>80</b>	5.879	3.919	3.919	3.919	3.919
<b>85</b>	0.000	0.000	0.000	0.000	0.000
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6DS-L40-840-DIM-UNV-RM-OF-WH\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	2491.39	N.A.	61.80
0-30	3426.48	N.A.	85.10
0-40	3787.43	N.A.	94.00
0-60	3984.22	N.A.	98.90
0-80	4027.27	N.A.	100.00
0-90	4028.4	N.A.	100.00
10-90	3148.78	N.A.	78.20
20-40	1296.04	N.A.	32.20
20-50	1429.28	N.A.	35.50
40-70	228.55	N.A.	5.70
60-80	43.05	N.A.	1.10
70-80	11.29	N.A.	0.30
80-90	1.13	N.A.	0.00
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4028.4	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	879.62
10-20	1611.77
20-30	935.09
30-40	360.95
40-50	133.24
50-60	63.54
60-70	31.77
70-80	11.29
80-90	1.13
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6DS-L40-840-DIM-UNV-RM-OF-WH\_.IES**

**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	98	98	97	95
2	109	105	102	99	107	103	100	98	100	98	95	97	95	93	95	93	91	90
3	105	99	95	92	103	98	94	91	95	92	89	93	90	88	91	89	87	85
4	101	94	89	86	99	93	89	85	91	87	84	89	86	83	87	85	82	81
5	97	90	85	81	95	89	84	81	87	83	80	85	82	79	84	81	79	77
6	93	85	80	77	92	85	80	76	83	79	76	82	78	75	81	78	75	74
7	89	82	77	73	88	81	76	73	80	76	72	79	75	72	78	74	72	71
8	86	78	73	70	85	78	73	70	77	72	69	76	72	69	75	71	69	68
9	83	75	70	67	82	75	70	67	74	69	66	73	69	66	72	69	66	65
10	80	72	67	64	79	72	67	64	71	67	64	70	66	64	70	66	63	62

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : 6DS-L40-840-DIM-UNV-RM-OF-WH\_.IES**

**UGR TABLE - CORRECTED**

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size      UGR Viewed Crosswise

X=2H	Y=2H	9.9	10.8	10.2	11.1	11.5	UGR Viewed Endwise			
	3H	10.6	11.4	11.0	11.8	12.2	9.7	10.7	10.1	11.0
	4H	10.7	11.5	11.1	11.8	12.2	10.4	11.3	10.8	11.6
	6H	10.7	11.4	11.1	11.8	12.2	10.6	11.3	11.0	11.7
	8H	10.7	11.3	11.1	11.7	12.2	10.6	11.3	11.0	11.6
	12H	10.7	11.3	11.1	11.7	12.2	10.5	11.2	11.0	11.6
		10.6	11.3	11.1	11.6	12.1	10.5	11.1	10.9	11.5

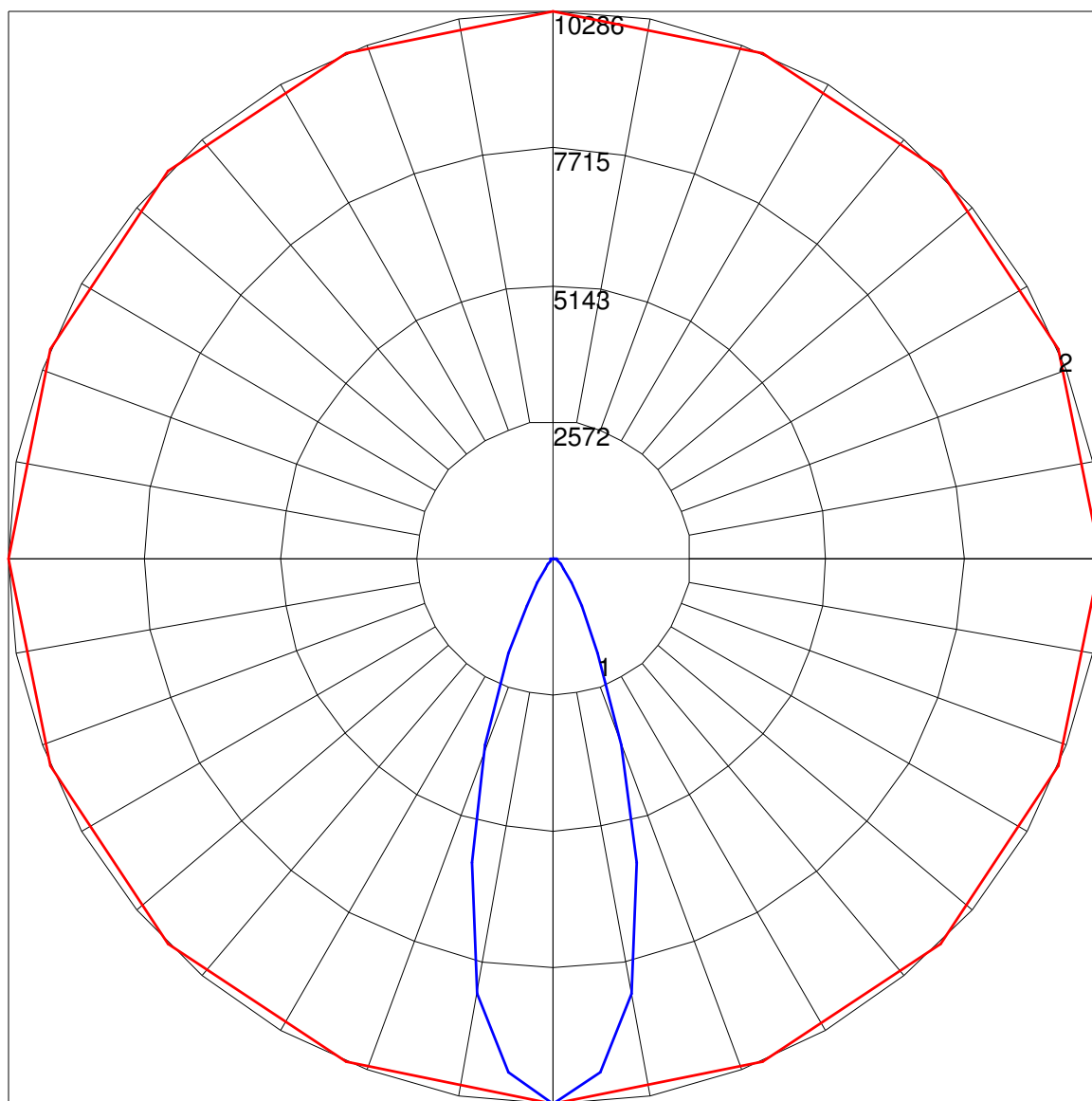
4H	2H	9.9	10.7	10.4	11.1	11.5	9.8	10.6	10.2	10.9	11.3
	3H	10.8	11.5	11.2	11.9	12.3	10.7	11.3	11.1	11.7	12.1
	4H	11.0	11.5	11.4	11.9	12.4	10.9	11.4	11.3	11.8	12.3
	6H	11.0	11.5	11.5	12.0	12.4	10.9	11.4	11.4	11.8	12.3
	8H	11.0	11.4	11.5	11.9	12.4	10.9	11.4	11.4	11.8	12.3
	12H	11.0	11.4	11.5	11.9	12.4	10.8	11.3	11.3	11.7	12.2
		10.9	11.3	11.4	11.8	12.3	10.8	11.2	11.3	11.7	12.1

8H	4H	10.9	11.4	11.4	11.8	12.3	10.8	11.3	11.3	11.7	12.2
	6H	11.0	11.4	11.5	11.9	12.3	10.9	11.2	11.4	11.7	12.2
	8H	11.0	11.3	11.5	11.8	12.3	10.9	11.2	11.4	11.7	12.2
	12H	11.0	11.3	11.5	11.8	12.3	10.8	11.1	11.3	11.6	12.1

12H	4H	10.9	11.2	11.3	11.7	12.2	10.8	11.1	11.2	11.6	12.1
	6H	10.9	11.3	11.5	11.7	12.3	10.8	11.1	11.4	11.6	12.2
	8H	10.9	11.2	11.5	11.7	12.3	10.8	11.1	11.3	11.6	12.2

Maximum UGR = 12.4

POLAR GRAPH



Maximum Candela = 10286.098 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)